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A COURSE OF CLINICAL LECTURES,

Delivered at the Hôtel Dieu, Paris, for the Session 1842–'43.

BY A. F. CHOMEL, M. D.

LECTURE II.

ON HEPATIC COLIC.

GENTLEMEN,—At No. 1, of the Salle St. Bernard, is a woman to whom I have called your attention, for the past few days. She has been a prey to the most horrible acute attacks, and her sufferings, at times, have been so intense, as to prevent her maintaining any fixed position. During the paroxysm her whole body is in a state of perpetual spasm; sometimes she lies on her side, and sometimes on her back, without being able to procure any relief from her sufferings by position. Her expression too is much changed, and denotes very plainly her intense suffering. To this state of excitement calm succeeds, and at the morning's visit, you can hardly believe, if you had not been witness of the scene, that this patient had suffered these tortures the evening previous. I shall this morning enter into some details respecting this case. And, let us first inquire into the cause of these acute sufferings: Was it an inflammatory affection of the intestinal canal, or of the peritoneum? This hypothesis cannot be admitted, as we have seen the patient lie on her belly, and compress strongly this region with her hands, without any augmentation of pain; on the contrary, it seemed to give her some relief. Now if the intestine, or its serous covering, had been the seat of phlogosis, all the movements which this patient made could only have exasperated the pain. We must give up all idea of inflammation in the organs in question. Whenever we see a patient a prey to intense abdominal pain, able to lie on his belly, and compress it with impunity, and even with relief, you may be pretty certain there is no inflammation there. Hence we must seek elsewhere the cause of suffering. This is not the first time, it seems, that this patient has experienced similar attacks. Seven or eight days since the same state of things occurred; the pain seemed to have, as now, the same point of departure—the epigastric region—irradiating itself from thence towards the sides, and fixing itself principally in the hypochondriac region. Then too, as now, the attack commenced in the evening, and after having lasted all night, ceased towards morning under the influence of opium. Similar scenes have been acted five times in the space of ten days, leaving each time some tenderness of the belly, and some general prostration; but without having been accompanied with vomiting, without diarrhœa or fever; the pulse, on the contrary, being rather below the natural standard. Here too is additional and positive proof that we have nothing to do with an acute inflammation of the principal abdominal organs. What viscus then is the seat or the point of departure of these pains? There are several organs which are capable of presenting a similar collection of symptoms; the stomach for example, becomes the seat of intense pain after the reception of a substance which disagrees with it; but in this case, which is no other than an attack of indigestion, there is always vomiting of the indigestible matter, and the symptoms once dissipated, do not return. Now nothing of this kind has taken place in our patient; she has taken nothing indigestible; all her food having been some light soup; she has not vomited; and the same train of symptoms have occurred several times, with intervals of calm of some length.

Hysteria, that proteiform malady, can, in some women, produce very severe suffering, the pain having its principal seat in the epigastric region. But in general these pains appertain to individual idiosyncrasy; a moral cause may be recognized as their origin. Hence those that we commonly see thus affected are fashionable women, of a highly nervous temperament, of lively passions, and ardent imagination; or certain women of the lower class, who, by position or profession, are in intercourse with the higher classes, from whom they borrow, so to speak, their moral character. Our patient belongs to neither of these classes; she has never suffered from hysteria. Before her entrance into the hospital, she had had a post-puerperal metritis. The first time that I saw her, the uterus was somewhat enlarged, and some sensibility persisted in the hypogastric region. But all these symptoms disappeared in a little time.—There was pain produced either by pressure on the lower part of the belly, and by an examination *per vaginam*. Besides, had the epigastric pains she has lately experienced, proceeded from the uterus, they would have been of entirely a different character. We cannot, therefore, look to this cause to explain the etiology and seat of the disease which occupies us. Sometimes rheumatism can affect isolated organs; leaving, in fact, the surface, to fix itself, by a genuine metastasis, upon some internal organ, where it ordinarily but rarely appears—as the stomach, intestines, bladder, &c. In these cases the pain is very acute, but it is never primary; the patient having suffered previously from rheumatism in some external organ, or their parents having been similarly affected. Besides, rheumatismal pain never reaches the same degree of intensity, and wants the distinctive character which the sufferings of our patient presents. The periodical return of the pain towards evening, its cessation in the morning, with the intervals of entire calm, might, for a moment, lead us to think of a class of intermittent affections called larvated fevers. We have hence inquired of the patient whether she has ever suffered from any disease of this kind, or ever inhabited any place where it prevailed, and she has answered in the negative. Essential intermittent fevers, too, present characters entirely different. In them the access takes place generally during the day; it is always preceded by a chill, followed by heat, and perspiration, more or less profuse. In our patient the access occurs ordinarily in the evening, is prolonged through the night without shivering, or any change in the temperature of the skin, for, as I have already remarked, the pulse has never presented a febrile character. Let us add,

finally, that the attacks have always been mitigated by the use of opium, or similar preparations. Now, intermittent fever rarely yields to opium. Hence we must abandon that idea, and look elsewhere for the cause. Lead and its preparations sometimes cause very severe pain in persons exposed to their influence. Saturnine colic offers nocturnal exacerbations rather than diurnal. But in this case the cause has not existed, or, to speak more strictly, to a sufficient degree; the patient tells us indeed that she was for sometime in the service of a dealer in paints, but she left it some four or five months since, and has never, in fact, experienced any symptoms which might be properly referred to a saturnine affection.

All these causes being eliminated, there remains only as the probable cause of the disease which occupies us, a material cause, such as the presence of a calculus, either in the ureter, constituting nephritic colic; or in the ductus choledochus, hepatic colic; or, the existence of a pancreatic calculus. This last affection, although very rare, has occasionally been successfully diagnosticated. In a woman, who died in this hospital soon after entrance, with symptoms referable to an affection of this nature, I found the pancreatic canal obliterated; all the pancreatic ducts were of the size of a goose's quill; they were united together, agglomerated, and resembled in appearance the gall-bladder. The proper tissue of the pancreas had nearly disappeared, and there remained only the internal and external membranes, the parenchyma being replaced by this collection of enlarged ducts. The alteration of tissue was similar to that which you observe sometimes in the kidneys, when the tubuli uriniferi and the pelvis become so much dilated, that they occupy the entire thickness of the organ, which is reduced to its enveloping and lining membranes, its cortical substance having entirely disappeared. I mention this fact to you in order that you may continue to collect observations in connection with the subject, for the number of registered facts of this kind are small, and quite insufficient to enlighten this point of pathological anatomy. This cause too I may then set aside as improbable. There remains, therefore, an hepatic or a nephritic calculus to account for the production of these symptoms. I do not think that there is any question of the latter affection, because the patient continues to urinate well, and we have never discovered any trace of blood or of calculous concretions in her urine. Besides, she has never complained of pain in the lumbar region, or along the course of the ureters, nor in the bladder; all which are constant symptoms in nephritic calculus. In fact, it is the clear and characteristic train of symptoms which renders the diagnosis of nephritic calculus so easy, indeed so much more easy than that of hepatic colic. Hence it is that we arrive at a correct diagnosis of this latter disease rather by the method of exclusion, than by any direct means.

Hepatic colic is a very interesting disease to study. It results from the passage of a biliary calculus from the gall-bladder by the ductus choledochus communis. I say a calculus proceeding from the gall-bladder, for it is there that these bodies are formed, and never elsewhere. So long as these bodies remain in the gall-bladder they occasion no pain, but the moment they leave it, and enter the ductus choledochus, the compression as well as the laceration of that canal which they produce, cause most excruciating agonies. It is not necessary for pain to be produced that the caliber of the canal be entirely filled up by the calculus, it is sufficient, as is commonly the case, that the gall-stone be angular, rough, and capable of lacerating the parietes of the canal, permitting at the same time a certain quantity of bile to escape past the inequalities. A calculus thus engaged in the duct is often capable of producing jaundice, but this symptom is not a necessary consequence of the presence of a calculus in the gall-duct, as some physicians have advanced. I have seen, and others, likewise, patients affected with hepatic colic, without any jaundiced tint. A further proof that this accident is not necessarily connected with the presence of biliary calculi, is the instability of the yellow colour in this class of patients. It appears and disappears rapidly from one day to another. Now this state of things does not occur in genuine icterus. The yellow hue, in this disease, persists ordinarily five or six weeks; it is the phenomenon in jaundice which lasts the longest; it sometimes remains when all has returned to a natural condition. A patient now in the wards presents an example of the transient nature of icterus produced by hepatic colic. I shall revert to this point subsequently. Hence we see that the absence of a yellow hue of the skin should not make us exclude the idea of the existence of hepatic colic. Thus two days since when I first called your attention to this patient, without saying anything of the cause or nature of the severe pain from which she was suffering, I should have been able then to have diagnosticated, by that symptom alone, an hepatic colic, in spite of the absence of jaundice. To day this symptom has appeared; her urine is of a deep yellow colour; there is hence no longer any doubt in this respect.

Some physicians think that when there exists pain, which appears and disappears, alternating with intervals of calm without vomiting, you may pretty surely suspect, though you cannot safely diagnosticate, hepatic colic. You should know that some patients experience no other symptom than acute pain, without vomiting, and without the rejection of the gall-stone by the mouth, or its passage by stool, and this is fully explained. When a calculus is arrested in the biliary canal, the hepatic secretion augments, and in consequence dilates by degrees that portion of the canal which is below the point occupied by the gall-stone, at the same time that the superior portion becomes constricted. It hence results that the stone not being able to advance on account of the narrowing of the canal, remains where it was stopped, or going backwards, returns into the gall-bladder. It is thus that we explain these attacks of colic unaccompanied by vomiting, or by the rejection of the biliary secretions. At the end of some time some fragments of calculus escape through a strictured portion of the canal, pass into the stomach or the intestines, and thence is rejected by vomiting, or voided in the stools, in the midst of a mass of excrementitious matter, where they may pass unnoticed. It may happen that the gall-stones may not be rejected externally, that they may have retraced their way, but they become dissolved in situ, without producing any of those symptoms which characterise, according to certain physicians, the disease of which I am treating. To day we have no longer any doubt on the score of our patient; we have as complement the symptom of jaundice well pronounced. Hence the real cause of the sufferings of this patient is the presence of biliary calculi in the ductus choledochus communis.

The study of these affections has been very much neglected for some time; it is, however, a subject of the highest importance. I cannot too much impress on you the frequency of this disease, or the number

of individuals who are a prey to these intense sufferings from this cause.

At the time when the physiological doctrine was in all its vigor, hepatic colic was attributed to an inflammatory condition of the liver, and it was treated by purely antiphlogistic means. Now adhering to the close observation of facts, you will find that rarely, if ever, a genuine inflammation of that organ ever caused any obstruction to the passage of the bile along the ductus choledochus. Dr. Andral himself, who published one or two facts apparently confirming the ideas of Broussais in this respect, acknowledged subsequently, with that frankness which characterises him, that he was influenced by the peculiar tone of the medical epoch in his interpretation of the phenomena. Genuine hepatitis, therefore, never produces hepatic colic, such as we are observing. Remark, in fact, what occurs in the various inflammations of the buccal cavity. Do you ever see as the consequence of these inflammations, accompanied often by the production of false membranes which line the entire mouth,—do you ever see, I say, the obliteration of the duct of Steno, or the ducts of Wharton, and the suppression of the flow of the saliva? On the contrary, the secretion ordinarily increases, and the flow of the secreted fluid is very free. The theory of Broussais was therefore pure hypothesis, which could not subsist in the face of facts and of reason.

What are then the causes of this disease? They are, we must acknowledge, very obscure. Veterinary medicine may spread some light on the subject. Veterinary surgeons have remarked that animals slaughtered during winter, after having been stall-fed on dry vegetables and other tonic substances, and kept without exercise, frequently present a large number of biliary calculi in the gall-bladder and bile ducts; whilst, on the contrary, these products are rare in animals killed in the spring and autumn, and who have been fed on fresh vegetable diet, and have lived in the open air. Hence, from analogy, it results that in man also, a sedentary life, a stimulating animal diet, and the privation of fresh vegetable food, contribute powerfully to the development of biliary calculi, and to the production of hepatic colic. From these facts we may deduce, too, the hygienic treatment adapted to these affections. Fresh vegetable diet, moderate exercise, and the use of alkaline drinks, such as the Vichy water, etc., to which we may add, for the medical treatment, purgatives in small and repeated doses, in order to facilitate the expulsion of the calculi which occupy the gall-duct. To effect this we should augment the biliary secretion, which mechanically forces the passage of the gall-stones arrested in the canal; this is the indication for purgatives. Turpentine and ether may be rubbed on the epigastric region, and over the liver, and you may even administer them together after the formula of Durand, who first proposed this treatment, and attributes much success to it. It is by this and other similar means, which you will find described in the special treatises, that you must combat this disease in the intervals of calm. During the attack you must assuage the sufferings of your patient by the use of opium, which you should administer in increasing doses, commencing with one grain, and sometimes reaching the quantity of fifteen to twenty grains in the course of the day; this quantity, of course, being given in fractional doses every hour, until some relief be obtained, or until some contra-indication occur. You should, however, watch closely the effects of this powerful remedy. When it is not borne by the stomach, you can use it by the rectum. This mode of administration does not demand less care and watching than the former; for you can as easily narcotise your patient in this manner as by the stomach, absorption being very active. When the attack persists for a long time the liver becomes enormously distended, and very sensible; fever occurs, and true inflammation sets in; you must then act accordingly; you must combat this secondary complication by local and general antiphlogistics, more or less energetic.

This disease, very painful for the patient, and alarming to the attendants, is rarely fatal; much less so, indeed, than nephritic colic. But you should be told that a radical cure is very difficult to effect. After the lapse of some time the ductus choledochus, where the calculus is stopped, dilates, and leaves a free passage to the foreign body, which is expelled either by the stomach or the rectum. At other times, as I remarked before, the canal becomes obstructed, the calculus becomes encysted, as it were, and disappears by degrees by absorption. Sometimes, in consequence of the entire obliteration of the canal, there is an arrest of the bile, which finishes by producing those serious disorders in the biliary apparatus which end in death.

At the autopsy of these cases you find the biliary ducts enormously distended at their superior portion whilst they are very much contracted at the inferior part; the gall-bladder is excessively dilated; the liver is swollen and filled with bile. In some rare cases you find profound organic alterations, and the biliary ducts filled with pus. Such are very nearly the lesions which you meet with in the very rare cases of fatal termination from this disease. This disease, I repeat, is very painful, but rarely followed by death.

Paris, Dec. 1842.

CLINICAL LECTURES AND REPORTS.

JEFFERSON MEDICAL COLLEGE.

CLINIC OF PROFESSOR MÜTTER.

Dispensary of Jefferson Medical College, Jan. 11, 1843.

LECTURE II.

(Reported by H. T. Child.)

(Concluded.)

CASE II.—*Epulis, developed in the substance of the gum, and originating in neglected Parulis,*—The patient, a female, aged 35, had suffered from the presence of the disease for the last twelve months. The tumour belonged to the class of "spongy epulis," and equalled in size a small walnut. It bled from the slightest cause, and was occasionally painful; the patient's general health was excellent, and the glands about the neck were not at all affected. Professor M. removed the tumour by passing a tenaculum through its substance in order to have it completely under control, and then with a probe-pointed bistoury separated it from its attachments. The teeth and bone in the vicinity being sound, it was deemed sufficient to limit the operation to the excision of the tumour. The hæmorrhage was profuse, and after the usual agents, pressure and styptics, had failed to arrest it, the actual cautery was applied, which at once accomplished the object in view.

The term epulis, derived from two Greek words, (*επι*, upon, and *ουλα*, the gums,) has been applied to tumours of different kinds which are developed in the gums, membranes of the teeth, periosteum of the alveoli, the surface or internal structure of the bones, or the membranous lining of their cavities. The

proximate causes of such growths are for the most part obscure, but many cases may be traced to carious teeth, neglected parulis, by which the bone was rendered carious or necrosed, blows upon the part, and fractures of the bones, as in the cases of Marjolin and Berrard, the chewing of acrid substances, as bad tobacco, and finally to some constitutional taint.

These tumours presenting different appearances and producing altogether dissimilar results, have been divided into distinct groups.

1st. The variety most commonly met with, is that characterized by the developement upon the gum, between the roots of the teeth, or in the alveolar socket, of a red, soft spongy mass, but slightly sensitive, and bleeding from the slightest touch; the constitution is but slightly, if at all involved, and the tumour is generally curable, but often returns when removed, and thus causes much anxiety to the patient. If neglected or treated with caustics it may assume a cancerous, or rather, a malignant action, and ultimately prove fatal. When the tumour originates in the alveolar cavities, the first indications of the disease are the loosening of the teeth which are perfectly white and sound, swelling of the gums, and a slight discharge of pus. This form of epulis is sometimes described as "Fungous of the Gums," and may be referred in many cases to carious teeth or injuries of the bone.

2d. A tumour very similar in appearance, but characterized in its commencement by pain, a foul and acrid discharge, disposition to ulcerate and bleed, is also found in the same spot. This is genuine cancer, and is one of the most intractable and obstinate of all the diseases of the gums.

3d. Another variety of epulis is characterized by a tumour, the tissue of which is much firmer than that composing the first and second kinds. The swelling is also beneath the mucous membrane, is usually smooth, very red, elastic, more or less compressible, and often pulsatile; affording no hæmorrhage, unless wounded, and possessing but little sensibility. When cut into, these tumours bleed freely, and when excised, present all the peculiarities of erectile tissue. They may be the result of injuries—but usually appear without any appreciable cause, and occasionally degenerate into malignancy.

4th. A fourth form of epulis is known by its roughness, hardness, pale and livid colour denoting slight vascularity, and often severe lancinating pain. The latter symptom is not, however, invariably present, and generally indicates, when met with, a malignant disposition in the tumour. It is this form from which the most danger is to be apprehended. Like all other tumours composed of this tissue they may remain indolent for many years, but depending as they usually, but not invariably do, upon a constitutional taint, such a result is not to be anticipated.

When either of the tumours just described, after having remained stationary for a longer or shorter period, takes on a new action, and grows rapidly, a new series of phenomena is at once developed. The teeth are loosened, the bones, if not before diseased, become carious, fungous masses of large size shoot up; the tumour, if originally hard, softens, a fœtid, purulent and bloody discharge is established, neighbouring parts, especially the lymphatic glands, are speedily involved in the disease, the whole constitution gradually gives way, and finally death, occasioned either by hectic, hæmorrhage, or suffocation, closes the scene.

The lower jaw is the most common seat of epulis, although the upper is by no means exempt from it; usually the tumour occupies the anterior portion of the bone, but occasionally it is seen on the sides or very far back. Its form and size varies, some are circumscribed with pediculated attachments, others have extended bases, and are lost in the adjacent parts, while in size there is the greatest diversity.

The prognosis will depend entirely upon the nature of the tumour, its size and disposition to increase. When of the first class and dependent upon carious teeth or bone, of moderate size, and with little or no disposition to spread, the case is one of easy management. Erectile epulis, although more serious in its character than the first kind, is yet a disease susceptible of cure, and rarely degenerates into cancer. But when the tumour is hard and fibrous accompanied by pain, and increases gradually, although certainly, and the constitution becomes involved, the case is one requiring all our attention, and often proves indomitable. The same may be said of the second variety of Epulis. Mr. Liston is under the impression that a genuine malignant tumour of the gum is *rare*, and in this I agree with him.

I have removed a great number of tumours of the jaws, in fear of their becoming malignant, and to relieve the patient's mind as much as any thing else, and have rarely failed in making a complete cure.

The only diseases with which epulis can be confounded are parulis, exostosis, spina ventosa, osteo sarcoma, and periosteal tumour, the result of inflammation. The history of the case, with an examination into the symptoms, will be sufficient to enable us to arrive at a correct diagnosis.

The treatment of this affection is of course modified by its nature and extent. Where it is merely a fungous mass arising from a carious tooth, or bone, or from necrosis, the indication is to remove the exciting cause, and then either pare off the tumour with the knife or scissors, or keep it down with cauteries and pressure. I prefer the knife, and if the granulations sprout they may be suppressed by caustic or astringents. The hæmorrhage which always takes place after the use of the knife may be arrested by compression or styptics, or the cautery. Erectile epulis, if pediculated, may be removed either by the knife or ligature, but where the base is extended its removal will require a much more extensive operation, for no part of the disease is to be left behind. The most profuse hæmorrhage is sure to be developed by cutting out such a tumour, and the actual cautery is usually required for its arrestation. If the tumour is small, compression with lint steeped in creosote or muriated tincture of iron will sometimes be sufficient to arrest the hæmorrhage.

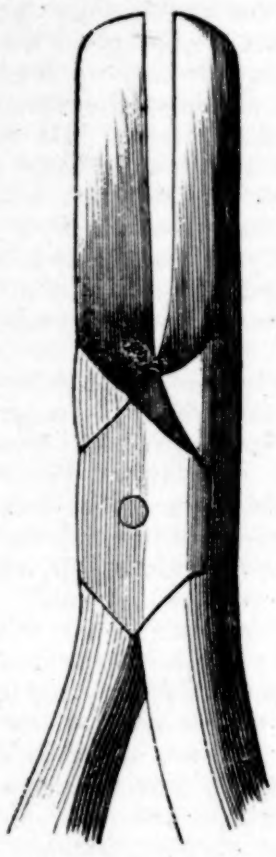
But whenever the tumour is hard, knotty and painful, or spongy and painful, in other words, presents traces of scirrhosity or cancerous action, a very different operation has to be performed, if we desire to eradicate the disease.

Nothing short of the complete removal of the tumour, teeth, and bone connected with it, and the application of the actual cautery to the surface from which we take them, will accomplish our object. For removing such tumours some propose the chisel and mallet, but the operation best adapted to the case, and one which will occasion the least suffering is the following:

Having placed the head of the patient in a good light, and against the chest of an assistant who stands behind the operating chair, the surgeon makes a perpendicular incision on each side of the tumour

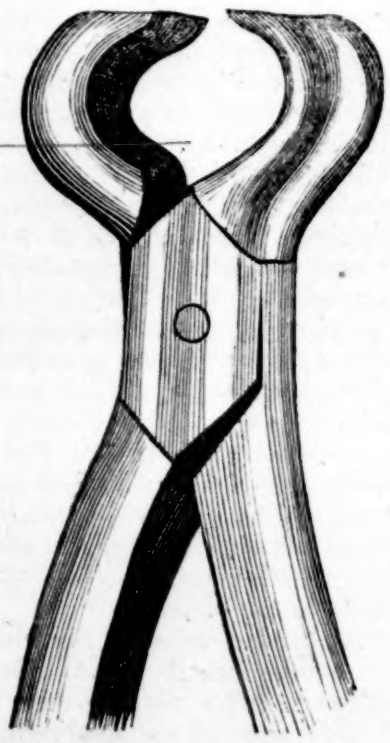
with a pair of strong scissors, or rather cutting forceps, (*fig.* 1.) and without stopping to arrest the

Fig. 1.



hæmorrhage, at once detach the mass by dividing the alveolar process *above* or *below* the tumour, as the upper or lower jaw happens to be involved, with cutting forceps, (*fig.* 2.) one blade of which is ap-

Fig. 2.

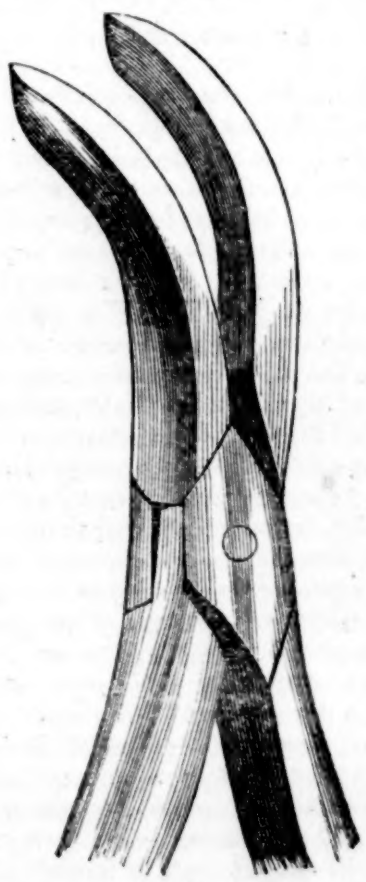


plied to the inner portion of the jaw, and the other to the outer. The raw surface is next carefully examined, and every vestige of the disease removed with the knife or scissors. If the bone appears affected it must be cut away, and often a very good preventive to a return of the disease is the use of the actual cautery. The bleeding may be arrested either by the cautery, or by placing a pledget of lint dipped in creosote, in the chasm over which a slice of cork may be laid and then closing the jaws, make the sound one act as a compress. To secure the dressing the bandage for fracture of the lower jaw may be applied. The parts should not be examined in the first twenty-four hours, but after this period a daily dressing is required, the nature of which depends on circumstances. If there be no disposition to a return of the disease, it will be sufficient to wash the parts with some detergent solution, until cicatrization is completed. But if fungous granulations make their appearance, the vegetable caustic, or actual cautery should be applied, until this disposition in the wound is destroyed. When the healing process is finished the deformity occasioned by the loss of bone and teeth can be readily removed by the introduction of false gums and teeth.

Instead of making the perpendicular cuts with the short forceps, some prefer a thin saw, but the method just described is less painful, and accomplishes the object in a much shorter period. Where the tumour is very large the saw may be required, and should always be at hand in case the edges of the forceps should turn in making the first cut.

Where the tumour is very large or seated on the side of the bone, or far back, the cheek should be divided in order to enable us to reach it without difficulty. In such cases I have found great advantage in using a cutting forceps (*fig.* 3.) so curved

Fig. 3.



as to pass readily to the back part of the mouth, and then allow of the blades being passed above the base of the tumour, when the upper jaw is affected, and below it when the inferior maxillary is the seat of the disease.

After the removal of the diseased mass the wound of the cheek must be closed, and union by the first intention attempted, and where the dressings are carefully attended to, the deformity resulting from the incision is scarcely perceptible, unless the *portio dura* is extensively injured, when paralysis generally incurable ensues, often giving rise to a very unpleasant expression of countenance.

Professor M. then exhibited a specimen of fibrous tumour of large size, which he had recently removed from a patient of Dr. Fromville's, of Montgomery county, in this state. In the operation cutting forceps of different construction were employed, and it was necessary to remove a large portion of the upper maxillary bone. The hæmorrhage was arrested by the cautery. He mentioned that he had performed the operation of removing the upper maxillary either in part or completely, five times, and had always used the forceps in preference to the mallet and chisel, or saw. He also stated that this bone had been removed, as well as large portions of the lower jaw, first by Gensoul, of Lyons; Graefe of Berlin; Dupuytren, of Paris; Sir Philip Crampton and Cusack, of Dublin; Syme, of Edinburgh; and Liston, of London, and recently by many others at home and abroad. These operations are, however, of recent introduction into surgery, and richly deserve being ranked among the most important and useful of our science.

UNIVERSITY OF PENNSYLVANIA.

CLINIC OF DR. W. POYNTELL JOHNSTON.

At the Locust Street Dispensary, Jan. 21, 1843.

[Reported from notes by Henry Sargeant.]

LECTURE II.

Case I.—*Granular blepharitis following measles—application of solid Sulphate of Copper.*—This little girl, æt. 12, was attacked with measles when 7 years old. The measles was accompanied with ophthalmia, and the eyes have remained sore ever since; notwithstanding various collyria which have been employed for their relief. On everting the eyelids, you will perceive that the conjunctiva, of a uniform velvety redness, and slightly puffed, presents a vast number of very minute facets. It exhibits perfectly the granular condition, to which we have already referred, as the result of long continued irritation. This condition serves to confirm what we have previously stated, that nature is generally unable to effect a cure when this condition of the mucous membrane is once established. The disease, in the present instance, has continued unimproved for five years. In this case we have seen that nothing short of an application capable of entirely modifying the granular surface of the conjunctiva, will afford permanent relief. By rapidly sweeping the surface with a solid stick of the nitrate of silver, or with a crystal of the sulphate of copper, the little ulcers rapidly heal, the irritation disappears, and the conjunctiva is restored to its normal condition and functions.

This case will serve, also, to introduce the next, in which a similar alteration, the result of long continued irritation, occupies the mucous membrane of the urethra, and may probably be relieved by a similar remedy.

Case II.—*Long continued masturbation—granular condition of the mucous membrane of the prostatic portion of the urethra—Nocturnal and diurnal pollutions—Imbecility—Hypochondriasis—Application of the solid Nitrte of Silver.*—J——— H——, upwards of 28 years old, presents, you perceive, the ordinary appearance of a lad of 17 or 18. He is emaciated; entirely devoid of beard, and speaks in the soprano voice of a youth before puberty. His gait is unsteady; his eyes habitually downcast; cannot be brought to regard you without trembling; when addressed, he averts his head, while his colour perpetually varies from palor to a deep blush. The pulse is feeble; variable, and occasionally intermittent; the skin is dry and harsh. He gives the following history of his case; but his memory is so defective, that the latter portions of his statement must be received with some degree of reserve. He remembers perfectly all the events of his childhood up to 11 or 12 years. He is also able to recall, with considerable accuracy, circumstances which took place between his 12th and 18th years; but since this period everything has left a confused impression upon his mind, and the occurrences of the last year are lost to him entirely.

It appears that he was in the enjoyment of excellent health until the age of 10 years; at this period he contracted the habit which has brought him to his present wretched condition. For three years he abandoned himself to excessive masturbation, and then had the courage to relinquish the habit for nearly a year, during which his health, which had suffered much, was manifestly improved. At the age of 14 he was apprenticed to a printer in this city, when he again renewed the habit to the same excess as before, (three or four times daily,) and has continued it unremittingly till within the last few weeks. His health, under the influence of this vice, again became impaired; his appetite was capricious; he suffered continually from nausea and headache. He almost invariably rejected his breakfast, and frequently his other meals. He was very often compelled to relinquish work early in the day, on account of the nausea and feeling of general distress from which he suffered. He gradually withdrew from the companionship of his fellows, and sought solitude. He became averse to the amusements of his age; and, although aware that his feelings of utter wretchedness were attributable to the vice into which he had fallen, he was unable to relinquish it. He made the effort, and discovered that if he abstained from masturbation, he was subjected to nocturnal pollutions, (two or three in the course of a night.) At the age of 18, these pollutions first became diurnal, and occurred as frequently as three or four times a day while he was engaged at his work as compositor. These were in turn followed by imperfect erection, and finally by impotence. It is from the period of the diurnal emissions that he dates the first effects upon his intellect. Memory, especially of names and dates, became confused, and, finally, almost entirely lost. He suffered continually from mental anxiety and depression; became remarkably timid; was afraid to retire to bed, and in the dark was tortured incessantly with the horrors, (we use his own expression;) his sleep was troubled and unrefreshing; in the morning he was unwilling to rise, owing to lassitude, and a dull dragging pain in the back.

At the age of 21 he was released from his apprenticeship, but has never since then had sufficient energy to keep employed. After working for a few days, harassed by the most gloomy and depressing images, he shuts himself up in his chamber, where, he assures us, he prays for death as a release from his mental sufferings. He has now relinquished the habit to a certain extent, but still is subject to diurnal emissions, which he cannot control, and which keep him in a condition of most profound melancholy. The manly character in his case cannot be said to have been lost, it has never been developed. He is startled and trembles at the slightest noise; his intellect is now so impaired that he cannot recall the events

of yesterday; he is perpetually tortured by frightful images, from which he cannot divert his mind; and while he is conscious that life and intellect are wasting away with the seminal discharges, he is entirely unable to arrest them, and despairs of relief.

This patient, gentlemen, presents a series of symptoms which are by no means rare. They will be frequently found to exist, to a greater or less degree, in young and middle aged men, although the instances are few in which they become so aggravated as in the case before you. These symptoms are not always referred to their proper cause, viz., too frequent seminal emissions, produced by continued excitement of the genital apparatus. The most obvious of the symptoms is mental depression; and the patient, regarded as a hypochondriac, is ordered tonics, baths, and a change of scene, which experience shows to be incompetent to cure. In very many of these cases of hypochondriasis which yield to no treatment, a careful investigation will discover that the genital functions are impaired or lost; and it is to the relief of these that we must address our remedies. The almost constant benefit which results from a treatment thus directed, will justify us in studying as largely as the limit of a clinic will admit, the causes of these emissions; for the emissions may be said to constitute the disease; although an effect themselves, they are the origin and cause of all the other phenomena, mental as well as physical.

It was not intended by nature that the seminal fluid should be discharged as rapidly as formed; it is necessary that a certain excess should remain, to be taken into the system, to circulate with the fluids, in order to give tone and character to the man. Remove the imperfectly elaborated semen prior to the age of puberty by artificial means, and let the habit be continued, and the changes in the organization and character of the individual, which should occur at this period, will not take place; there will be an arrest of development, and, as in the case before you, although the *age* of manhood may be passed, its *character* will never be attained. Still further; should the age of puberty have been passed prior to indulgence in this destructive habit—should the individual be in possession of the intellect, courage, and physical vigor, which are the attributes of this period, they will exist only to be lost. The appearance of involuntary emissions will be the signal for a retrograde movement towards timidity and imbecility, and the sufferer will again become—to use his own almost constant expression—a perfect child.

Masturbation to excess is the most general exciting cause of involuntary seminal discharges—but probably not the only one. Frequent excitement, the result of a lascivious imagination, absolute continence in individuals endowed with strong animal passions, appear occasionally to produce them. We have not unfrequently seen cases where we could refer them to no other source—where masturbation was positively denied, and the denial confirmed by the moral character of the sufferer. But whatever the exciting cause, the effects of involuntary pollutions are always analogous to those enumerated by the patient before you. These effects vary in intensity with the frequency of the emissions, but always present the same type, and can rarely, if ever, we apprehend, be referred to any other source.

We can only at present briefly allude to these effects, the limit of a clinic does not afford us space to enter into details, and they have nearly all been enumerated in their most common order of succession by the patient presented to you. He was first made aware of the injury he was inflicting upon himself, by the loss of energy, and the mental anxiety which he experienced; he was constantly tormented by vague apprehensions, which finally amounted to "horrors," and at present, although he habitually seeks solitude, he fears for an instant to be left alone. His memory next became impaired, he gradually discovered a difficulty in recalling names and dates, and following this all the functions of the brain became, in turn, more and more sluggish, until, as you now perceive, they can scarcely be roused into momentary action; he has almost reached a state of dementia, which is the ordinary termination of this malady, if it be not arrested in time. The records of every insane asylum will exhibit to you a startling proportion of its inmates who have been reduced to imbecility by this cause alone; and your own observations will show you, that many cases of mental derangement are probably rendered permanent by a persistence in the habit of masturbation, which has become uncontrollable. Insanity from this cause constantly assumes the form of dementia, never of mania.

Insanity does not, however, occur abruptly—it is slowly reached by successive stages—a pervading idea of the most depressing character first occupies the mind, the sufferer conceives that he is a species of outcast, hopelessly dying; this leads to a discontented, misanthropic disposition, and subsequently to a profound melancholy, and this latter assumes the character of suicidal monomania; he constantly speaks of death as a release from his sufferings, and appears to desire it, yet we know of no case in which an individual thus afflicted, has possessed the courage—if courage it may be called—to terminate his own existence; on the contrary, while from his expressions he would seem to court death, you will find that constant apprehension of death constitutes his chief source of misery.

The digestive functions are early impaired, the patient is habitually constipated; the constipation does not always depend upon imperfect digestion alone, but is maintained also, as we shall see, by a mechanical obstacle to defecation, an enlarged prostate gland; the appetite from these causes is rendered capricious, and the bowels are habitually distended by gas.

Nervous symptoms are always present in some form, but their form varies in each case. The patient complains ordinarily of palpitation of the heart, of fulness of the head, vertigo and giddiness, of temporary amaurosis, and his gait is frequently staggering, owing to inability to regulate the movements of the limbs. We have seen cases where, in connexion with spermatorrhœa, there existed violent neuralgic pains in the intercostal nerves, in those of the face, and of the lower extremities. In one case a cataleptic condition of the right arm was of frequent occurrence; in another epileptiform convulsions of the chest and diaphragm, without loss of consciousness; in a word, the nervous symptoms, as in hysteria, may assume any form, and simulate various organic diseases.

We have here, then, a succession of general and local symptoms which are obviously connected with the frequent seminal discharges. They are always present when involuntary emissions exist. They vary in intensity with the frequency of the emissions; and we shall find that they subside and even disappear when the emissions are checked. Now we have seen that these emissions are generally caused by excessive masturbation, and are ordinarily found in young and middle aged persons. We do not recall a single instance out of a very large number which it has been our lot to observe, in which the disease

commenced after the age of twenty-five, but when once established it may continue for an indefinite period, with or without a persistance in the habit which first produced it.

This appears singular; an individual relinquishes the habit of masturbation entirely, yet the emissions continue involuntarily; the sufferer cannot arrest them, although apprised of the moment at which they are about to occur. The slightest excitement, mental or physical, will produce them, without a sensation of pleasure, and without erection. We have known them to be caused daily by the mere titillation of a razor in the act of shaving. They are not disposed to diminish in frequency, but, on the contrary, to increase; and occasionally, notwithstanding every precaution, and the entire cessation of the habit to which they owed their origin, they terminate in a real spermatorrhœa—an incessant dribbling of imperfectly elaborated semen, mixed with prostatic mucus.

Why is it, that when the cause of the excitement is removed, the effects do not always cease? It is because a long continued irritation has produced an organic alteration in the prostatic portion of the urethra in the vicinity of the ejaculatory ducts and mucous lacunæ, and this organic alteration, once established, becomes a permanent source of irritation to the whole genital apparatus.

The character of this alteration may be inferred from the changes which we know to occur in the palpebral conjunctiva, from a similar cause, viz.: protracted irritation.

Mucous membranes are not all identical—but between the palpebral conjunctiva and the lining membrane of the urethra, there is perfect identity—identity of structure, identity of secretion, identity of diseases which are mutually transferable, and even susceptible of a true metastasis from one to the other. We may then rationally infer that the terminations of these diseases will be identical, and that a plan of treatment which is found effectual to cure in the one, will be equally serviceable in the other.

Now, the result of long continued irritation of the palpebral conjunctiva is the production of a granular condition of its surface; this granular condition is rarely removed by the unaided efforts of nature, but may continue for an indefinite period, and during its continuance is a permanent source of irritation to the whole occular apparatus. Of these facts we have furnished to you abundant proof.

By parity of reasoning a protracted irritation of any portion of the urethra, should be followed by a similar change, and the continued excitement of the prostatic mucous membrane, the effect of masturbation, should result in a granular condition, which once established would persist, and be the centre of permanent irritation, which would radiate through a continuous membrane to all parts of the genital apparatus. Now, this granular condition of the prostatic mucous membrane does really exist in spermatorrhœa. Of this you can readily convince yourselves by examining subjects who have died in our prisons—and who during their solitary confinement generally fall into the habit of masturbation. Addiction to this vice is probably one of the causes of the frequent mental derangement, with which the system of solitary confinement is reproached.

Admitting then, what conforms with reason and is proved by observation—that a granular condition of the prostatic mucous membrane is established—we readily account for all the local symptoms which ensue, and for their persistence.

The irritation is transmitted through the ejaculatory ducts to the *vesiculæ seminales*—causing spasmodic contractions of these reservoirs. The first effect of the spasmodic contraction is to produce too prompt an ejaculation during coition, and in succession to render coition imperfect, and then impossible. The emissions from this cause then become involuntary, at first nocturnal under the influence of a lascivious dream, they are gradually repeated at shorter intervals, under a continually augmented exaltation of sensibility, until they occur without pleasurable sensations, or without erection. Diurnal pollutions next follow, and finally *spermatorrhœa*. The fluid is rejected by the seminal vesicles as rapidly as it is received.

Again: the irritation is transmitted through the *vas deferens* to the *testicles*. A greater amount of fluid is secreted by these organs and thrown into the seminal vesicles; but this fluid no longer possesses the qualities of healthy semen; it is imperfectly elaborated, very liquid, and only serves to increase the number and amount of the emissions, while it loses its power of impregnating. This condition of the seminal fluid contributes, of course, with the inability to erect the penis, to produce impotence.

Again: the irritation is transmitted by continuity of tissue to the *bladder*. The urine is almost constantly turbid, and not unfrequently fetid. This condition of the urine is produced partly by the extension of the irritation to the kidneys, modifying their secretion, and causing pain in the loins, and partly by an increased mucous secretion from the internal surface of the bladder itself. Careful microscopical examination has shown that it does not depend upon an admixture of seminal fluid with the urine, as was at first supposed. When spermatic animalculæ are found in the urine, they are found only in the first portion discharged; in the washings of the *urethra* after an emission, the last portions, which are the most turbid, contain only mucus and saline particles.

Again: the irritation extends to the *parenchyma of the prostate gland*: the secretion of prostatic mucus is augmented, and the size of the gland is generally increased. We have seen this gland, in a case which was also examined by Professor Jackson, so much enlarged that the finger could with difficulty be passed between it and the sacrum. The enlargement of the prostate offers a mechanical obstacle to defecation, and thus contributes to the habitual constipation under which the patient labours. The hardened fæces in turn react upon the prostate, and compress it during their passage. Hence a common symptom in this disease. At each effort at stool the compression of the gland forces out a portion of prostatic mucus, of which there is a hypersecretion, and the patient is disheartened, under the impression that it is a seminal emission. The microscope has shown us that the fluid thus discharged is simply prostatic mucus.

Now, to recapitulate: a long continued irritation of the mucous membrane of the urethra, maintained by venereal excitement, confined to that portion of the canal which may be considered as most intimately connected with and forming part of the genital apparatus, terminates in a granular condition of the mucous surface. The granulations constitute a permanent centre of irritation; grouped around the verumontanum, at the orifices of the ejaculatory ducts and of the lacunæ of the prostate gland, extending from their situation to the neck of the bladder, they radiate their influence to all the organs with which they are connected by continuity of tissue, and their existence abundantly accounts for all the local phenomena which we have enumerated.

There remains but one other point of study in

present case. We have referred the general prostration of the patient to the frequent involuntary emissions with which he is afflicted, and we see that these emissions depend probably upon a change of structure in the urethra, which is disposed to persist, an alteration of structure which nature unaided is incompetent to cure. This is the origin, the material cause of all the phenomena, and upon its removal will of course depend their disappearance. Is it possible to restore the prostatic mucous membrane to its normal condition, to allay its sensibility, and prevent it from radiating an irritation throughout the genital apparatus? If so, the emissions should cease when their cause is removed.

Let us again revert to the granular condition of the conjunctiva, remaining for years without improvement, while subjected to no treatment, or to an inefficient one. You have seen these granulations in every instance removed without difficulty by the application of sulph. of copper, or nitrate of silver, in the solid form, and with their removal the irritability of the eye has promptly disappeared. We might infer from this that a similar effect would be produced by a similar application to the prostatic portion of the urethra, and experience proves that such is the case. The solid nitrate of silver applied by means of the instrument of Lallemand, so as rapidly but completely to sweep the whole irritated surface, to coat the granulations with a delicate pellicle, and modify the mucous surface, care being taken not to produce a loss of substance—*not to cauterize*—will be followed by a more or less copious discharge of blood, after each passage of urine. The bleeding will cease in the course of a few days, and already the sensibility of the prostate will be found allayed, and the emissions less frequent; but the effect of the application does not cease here; the parts are stimulated to a more healthy action, and continue to return more and more to their natural condition. On this account, the application should not be repeated at too early a period; nor until full benefit has been derived from the first operation. A return of the emissions is the proper signal for its repetition, which may be required two, three, or four times at longer intervals, before the parts are entirely restored to their normal condition and functions. As the emissions under this plan of treatment diminish in frequency, and finally cease, the melancholy condition of the patient is proportionally improved. The first marked effect is a restoration to hope. From despairing of relief, he frequently becomes sanguine of cure, and this hope is maintained by the successive mitigation of all the symptoms. Time will not permit us on the present occasion to follow the gradual progress of the cure, nor to prove to you that the dangers with which this simple operation has been charged, are entirely imaginary. It has been our lot, during the last six or seven years, to perform it some hundreds of times, and in no single instance has it been followed by an alarming symptom.

Some other points connected with the cure of this affection, we are compelled at present to neglect. We cannot, however, dismiss the subject without referring to the researches of Professor Lallemand upon seminal emissions. It is to him that we are entirely indebted for the mode of treatment which we here exhibit, and if we have not before alluded to the labours of this gentleman, it is because his name is so identified with the subject that incessant reference would have been required throughout the lecture. We apply the nitrate of silver, gentlemen, and will again bring the case before you, in order that you may follow its progress.

BIBLIOGRAPHICAL NOTICES.

Lectures on the Diseases of the Urinary Organs. By Sir Benjamin C. Brodie, Bart. F. R. S. Serjeant Surgeon to the Queen. From the third London edition, with alterations and additions. Philadelphia: 1843. 8vo. pp. 214.

Sir Benjamin C. Brodie is confessedly at the head of British surgery. He is known for his sound judgment and the practical character of his mind. These qualities, joined to an unrivalled experience in the metropolis of the civilized world for some thirty years, are calculated to excite high expectations of excellence in any professional production emanating from him. The publication of the present work will not disappoint these hopes. In it Sir B. Brodie fully sustains his reputation. The work is the result of the author's abundant experience; and the excellent curative recommendations, modestly inculcated, come from one perfectly familiar with the subject. This is a signal excellence over the crude compilations we are so constantly called on to notice. Its appearance is opportune, supplying as it does, in a measure, a great want in English medical literature. It is by no means a complete treatise on the diseases of the genito-urinary apparatus, but those affections which are treated are ably and fully handled.

The work is a valuable contribution to the department of surgery of which it treats. We strongly and cordially recommend it.

The first part of the volume is dedicated to the diseases of the male urethra—stricture, and its consequences, urinary abscesses and fistulæ. Too little perhaps is said of the pathology of this common, but ill understood affection; and the treatment by the nitrate of silver is rather hastily dismissed, when its importance in certain cases is considered. In speaking of Dr. Arnott's new method,—the introduction of a tube of varnished silk into the stricture, and its dilatation by the impulsion of air by a syringe—Sir B. Brodie objects to the practice as one not calculated to fulfil the proposed intentions. The great danger, we conceive, of Dr. Arnott's plan, is the risk of rupture of the urethra, especially when the unsupported membranous portion is the seat of disease. A resort to cutting instruments is unequivocally condemned.

Several good chapters on some of the diseases of the bladder and of the prostate gland next follow. The last six chapters are on calculus vesicæ and its treatment. This is the most interesting part of the work, and we regret not being able to enter more into details upon it. This subject is fully and ably handled, and we especially commend these lectures to the study of the reader. They will amply reward the time and labour bestowed on them. The concluding chapter is on Lithotripsy. In the former edition of this work, Sir B. Brodie did not feel himself "competent to offer more than a few general observations. I have now ventured to discuss this new method of treatment more at length, giving some practical instructions for the performance of the operation, which may probably be acceptable to the younger members of our profession, and to those whose minds have not yet been directed to the subject, at the same time endeavouring to assign to it what I believe to be its pro-

per place among the appliances of surgery, and what, if I am not greatly mistaken, will be conceded to it by others, when time and experience shall have dissipated alike the prejudices of those who underrate its importance and usefulness, and of those who hold it to be more really useful than it really is."

The Diseases of Females: Including those of Pregnancy and Childbed. By Fleetwood Churchill, M. D., etc., etc. Second American Edition. With Notes. By Robert M. Huston, M. D., Professor of Materia Medica and Therapeutics in the Jefferson Medical College, etc., etc. Philadelphia: 1843. 8vo. pp. 575.

This work comprises Dr. Churchill's Treatise on the Diseases of Females, with that on the Diseases of Pregnancy and Childbed. Its publication is an acceptable service to the profession, supplying a want universally felt. Though defective in many points, and more characterized by plodding industry than original talent, it is, perhaps, the best and most complete book on the subject in the language, and we can cordially recommend it to the student and practitioner. The additions of Professor Huston are chiefly to the chapters on Chlorosis, Uterine Leucorrhœa, Prolapsus Uteri, Ovaritis, Convulsions, Puerperal Fever, and Rupture of the Uterus; and though not very extensive, supply some omissions on the part of the author, and render the work more complete. The remarks of the Editor on the nature and treatment of Puerperal Fever are just and sound, and his caution against the indiscriminate employment of bleeding in this malady, when epidemic, is timely and judicious. Even where the local disease would seem to justify the employment of depletion, the constitutional condition frequently forbids its use.

A Practical Treatise on Venereal Disease; or, Critical and Experimental Researches on Innoculation, applied to the Study of these Affections; with a Therapeutic Summary and Special Formulary. By Ph. Ricord, M. D., Surgeon of the Venereal Hospital at Paris, etc., etc. Translated from the French. By Henry Pilkington Drummond, M. D. Philadelphia: 1843. 8vo. pp. 256.

No surgeon has done more towards the elucidation of the nature and treatment of this horrible malady than Dr. Ricord. The practical results of his zeal and research have been an improved therapeutics, and a vast amelioration in the amount of suffering. The publication of the present translation will contribute to the further dissemination of sound views of practice and pathology.

DR. HAYWARD ON THE STATISTICS OF PULMONARY CONSUMPTION.

It is well ascertained that this formidable disease was on the increase in Great Britain from the beginning to the middle of the last century, and that it remained stationary from that time to the year 1837, the period when the calculation was made. This increase was greatest among the middling and upper classes of society; in fact, the lower classes, it was thought, did not suffer more from it than formerly; which was perhaps to be attributed to an improvement in their mode of living. This increase is the more remarkable, as the mortality from other diseas has lessened in a striking degree in the same peri of time. In the year 1700, the number of yearl deaths in every 1000 inhabitants in the city of Lo don, from all diseases, was 31, and only 4 of the were from consumption; while in 1821, the numb from all diseases was only 19 in 1000, and 6 1-5 these were from consumption. From that period the year 1837, the proportion of deaths from the two sources remained the same.

To ascertain if a similar condition of things ob tained in this country, Dr. H. has examined the bil of mortality of Boston, New York and Philadelph from 1811 to 1840, a period of thirty years.

The most striking fact brought to light by the tables, is the great decrease of deaths by consum tion in these cities. This descrease has been gre in all, but greater in Boston than in either of t others; and this is not only a relative, but an absol decrease, for the mortality has been somewhat mo during the last ten years than it was thirty years ag At that time the deaths were about 22 to every 10 inhabitants; and now they are nearly, if not qui 23 to 1000.

It appears, that during the whole period embrac in these tables, Philadelphia has suffered less fr consumption than either of the other cities; t average number of deaths from that disease for t whole time being as 1 in 7.003 of the whole numb while in Boston they were as 1 in 6.185; and in N York as 1 in 5.547. But during the last ten yea Boston has enjoyed the greatest exemption. Fr 1831 to 1840 inclusive, the deaths in Boston fr consumption were only 1 in 7.587, in Philadelp 1 in 7.482, and in New York 1 in 5.952.

It will be seen, by examining the bills of mortal of the city of Boston, that there has been a v striking and uniform improvement as to pulmon consumption since the year 1811. By the Uni States census of 1810, Boston contained 33,250 habitants; in 1820, 43,298; in 1830, 61.392; and 1840, 93,452. In 1811, when the population had probably increased at all from the preceding year, it was a period of great depression in commerc affairs, the whole number of deaths was 742, of wh 221 were of consumption; while in 1840, with population nearly three times as great, and w nearly three times as many deaths, there were o 19 more fatal cases of consumption, the whole nu ber being but 240; not quite one in 8 of all the dea and not 3 in 1000 inhabitants.

Dr. Hayward contends that this decrease of m tality in consumption in Boston is real, and is attributable to improved diagnosis as some have e tended. He thinks it should be referred to a com nation of causes, rather than to any single one.

These I should say were mainly the great impro ments that have taken place in living during the thirty years; to the increased comforts of life, wh are now enjoyed by every class of the communi People are better fed, better clothed, live in m comfortable houses, indulge less in excesses of kinds, and pay more attention to personal cleanlin than they formerly did. They adopt better and m effectual means to protect themselves from the vi situdes of temperature, and the low rates at wh cotton fabrics can be obtained, and the conseq general use of them, have no doubt contributed ess tiallly to this desirable result.

N. E. Quar. Journ. Med. and Surg. Jan. 184

RETROSPECT OF THE MEDICAL SCIENCES.

Successful Operation for Strangulated Hernia in an Infant seven weeks old. By Mr. CÆSAR HAWKINS.

Charles Tunstall, æt. seven weeks, was admitted into St. George's Hospital, Feb. 21, 1840, with oblique inguinal hernia, which had been strangulated two days, during which time there had been no evacuation. The child had constantly vomited when put to the breast, and the countenance was pallid and sunk, and expressive of severe suffering The tumor was of considerable size for so small a child, and tense, though not externally inflamed. Attempts had been made to reduce the tumor before the child's admission, with the assistance of a warm bath: castor oil had been administered, and one leech applied. The mother was not aware that the hernia existed at the time of birth, but she had observed the child cry whenever the part had been washed or touched.

It was obvious that no time could be lost, and I immediately performed the operation, and returned the intestine, which was little inflamed; the sac was very thick, and contained a good deal of fluid.

An evacuation took place an hour after the operation, and the next day, February 22d, there had been no return of sickness, and though the child refused the breast it had taken a little arrow-root; the countenance was also improved; the tongue moist, and the pulse had tolerable force, though it was rather slow and irregular; the abdomen was soft, but pressure made the child cry. Relief was given by a chamomile poultice.

23d. This tenderness had gone, and the child again sucked readily, and the wound looked healthy.

On the 25th I was rather anxious on account of the urine, which had made the wound tumid and inflamed; the sloughing was confined, however, to the cellular membrane and the outer part of the sac, and the wound afterwards healed well.

I saw the child a few months ago, at which time a considerable sized hernia existed under the cicatrix.

I have reason to believe that an opinion is commonly entertained by medical men that hernia is attended with little danger in infants; but although, doubtless, not so liable to strangulation as in older persons, the opinion leads to grave errors in practice, if it is neglected. On this account I conceive it is the right practice to endeavour to obliterate the canal at the earliest period by the gentle pressure which can be applied in the youngest infant by the common belt and pad, and understrap, or by a small spring truss:—

1st. Because strangulation may take place, as in the case above related, so as to require an operation, which might probably have been prevented, if pressure had been used to keep the bowel up. In two instances I have seen strangulation at the early period of three weeks, and in one of these cases reduction was effected with much difficulty by means of ether dropped constantly on the tumor for about an hour and a half: there was much sickness in this case, and a good deal of tenderness of the tumor, and it was clear that I could not have delayed the operation very long. In another case an operation was performed by another surgeon of the hospital, in a child about two years old, but it was followed by fatal inflammation.

2d. By using pressure at an early period, the surgeon takes advantage of the natural disposition to obliteration of the canal, which exists at the time of the descent of the testis, so that a cure may be effected in four or six weeks, which will require as many months at a later period; and,

3d. The difficulty of the cure is very much increased by the enlargement of the canal from frequent protrusion of the bowel. A few months ago, I was consulted by a lady whose child was ten months old, with a hernia of three months' duration, which had increased considerably in size, and was very difficult to keep up by a truss: she had been advised by a provincial surgeon of much repute to do nothing for the hernia, but as her usual attendant saw it increasing, I was written to on the subject, and I think much trouble might have been saved if a truss had been used as soon as the hernia had been discovered.

Some countenance is supposed to be given to the common opinion, by the authority of Sir Astley Cooper; who does not, in fact, however, recommend this delay, except in the few cases in which I should agree with him in postponing the treatment, viz.: in cases in which the testis has not descended into the scrotum, but lies in so inconvenient a position in the groin, as to prevent the application of a truss. Even in these cases, however, attention should be paid to the further progress of the testis, so that the pressure may be delayed, not to the time of puberty, but only to the earliest period at which this gland may happen to have descended low enough to allow the truss to be used.—*London Medical Gazette*, December 30, 1842.

FRACTURE OF THE CLAVICLE WITHOUT DISPLACEMENT.

In some cases of fracture of the clavicle occurring about the middle of the bone in young subjects, displacement of the fragments does not immediately take place, thus giving rise to a risk of an error in diagnosis, by which the ultimate probability of a cure is diminished. A lad, seventeen years of age, was recently admitted into the Hôtel-Dieu, under the care of M. Blandin, having a few days previously, fallen upon one of his comrades while playing with him, when he instantly experienced pain, and a cracking sensation about the middle of the left clavicle, where there soon formed a tumor, which, increasing, induced him to enter the hospital. On examination, the swelling was found to occupy the middle of the clavicle; it was about as large as half a hen's egg, ovoid in shape, well circumscribed, colorless, and hard, but sensible to pressure. There was not any deformity of the shoulder, nor any abnormal modification of the axis of the bone, to indicate the existence of a fracture, and although the different movements of the arm caused pain in the shoulder, yet they could be made without much difficulty.

The symptoms in this case would lead to the belief that it was a case of simple periostitis, caused by external violence; but M. Blandin at once decided that there existed a fracture of the bone, having seen a similar case previously at the hospital Beaujon, where the tumour was treated as traumatic periostitis, the patient merely carrying his arm in a sling, until, by a sudden movement of the limb, displacement of the fragments was produced, and clearly demonstrated

the existence of a fracture. A second case occurring soon afterwards, M. Blandin profited by the experience gained from the preceding, and by moving the fragments of the broken clavicle on each other, obtained motion and crepitus. Still these indications were not so clear that M. Marjolin could diagnosticate a fracture; he was of opinion that the case was one of exostosis, probably syphilitic, and the crepitus he believed depended on an erosion of the osseous surface. In consequence, the patient was left to himself, until a movement of the arm gave proof of the fracture by the displacement of the broken portions of the bone.

Two other cases occurring in young subjects have been admitted since into the Hôtel-Dieu under the care of M. Blandin, one of whom was purposely left without surgical assistance, while Dessault's bandage was applied to the other. The former soon showed evidence of consecutive displacement; the latter was cured without any deformity following.

The surgeon may diagnose a fracture, without displacement, of the middle portion of the clavicle, when a circumscribed tumor forms in that part in young subjects, consecutive on a fall on the shoulder, and motion of the fragments with crepitus can be detected, there not being any syphilitic taint in the constitution.

M. Blandin considers the elasticity of the periosteum, and the cartilaginous layer covering the bone in young subjects, as the cause of the broken portions of the bone not separating from each other until after a fresh action on the part overcomes the resistance offered by the fibrous envelope. The five patients who came under his notice with this accident were all under twenty years of age.—*Prov. Med. Journ., from Journ. de Med. et. Chir. Prat.*, July, 1842.

THE DISEASES OF NIGHTMEN.

A communication from MM. Bricheteau, Chevalier, and Furnari, has been published on the diseases to which nightmen are liable, from which it appears that this mode of gaining a subsistence, although dirty and disgusting, is less unhealthy than many others that may easily be named; the workmen continue to practice it to a great age (from 20 to 65 or 70;) that it is probably curative or preservative from certain diseases of the skin; and, lastly, nightmen are less exposed than many other workmen to attacks of epidemic diseases. The statements thus made are drawn from direct observation, from the replies of the masters, and other sources. The men themselvss are generally healthy, strong, and vigorous, and their children, equally healthy, do not manifest any repugnance to their parents' employment.

The two chief complaints to which these men are subject, arising from the nature of their occupation, are—a peculiar ophthalmia resulting from the direct influence of the deleterious gases disengaged in cesspools on the eye, the effects of which are never permanent, and the asphyxia produced by the inhalation of the same gases. To this latter affection nightmen are less subject than masons who are engaged a few days after the emptying of the cesspool to repair the brickwork; no cases of the kind would occur if proper care were taken to ventilate the cesspool, and to clear out the gases previous to the men going down into it. That it can easily be avoided is proved by the fact, that a master nightman who employs annually from eight to twelve nightmen and masons, has not had a case of asphyxia among them for twenty years, and another who has from eight to men daily at work, has had only one case, w was cured in ten hours; and a third master, em ing fifteen men, including carters, had also neve a case The most dangerous periods are at the mencement and termination of the work, and few days after the cesspool has been emptied; exhalations are more active, and accidents mor quent in the summer and autumn than in winte spring.—*Prov. Med. Journ. from Annales d' H éne Publique*, July, 1842.

MORBID ANATOMY OF THE NERVOUS SYSTEM.

On examining "Schmidt's Journal," No. 487 find, in a paper on the Morbid Anatomy of the N ous System and the Organs of Sense, that much tention has recently been devoted by M. Gluge determining the morbid appearances in the a portions of the frame by the aid of the microsc The appearances in the brain after death from a hydrocephalus do not afford, he says, any indicat of previous inflammation. The serosity exuded to the ventricles contains but little albumen, and softening of the brain in the parts contiguous app to be solely an effect of maceration. The red p scattered throughout the cerebral substance in c of congestion, M. Gluge has ascertained to be du an extraordinary number of capillary vessels c pactly united with each other, and which he reg as vessels of new formation. Apoplexy, he say always attended with sanguineous effusion, the r tured vessels being in some cases the capillaries others the larger arteries. The apoplectic nucl examined immediately, or a few days after deat found to consist of a coagulum of red globules fibrin, seldom much consolidated; and of the rem of capillary vessels, commonly filled with coag ed blood. The white filmy shreds inclosed in clot are not false membranes, the products of infl mation, but broken down cerebral substance.—*L Lancet.* Dec. 31.

IRIDOPLASMA.

Iridoplasma is a name given by M. Gluge t degenerescence of the eye, the structures of wh assume colours that are very different from th which they have in their natural state. In one stance that he has reported the eye consisted succession of structures of four different colo The first was composed of a substance which similar, both in consistence and colour, to the br of a newly born infant, inclosing many whitish regular bodies. The second and third layers w pale, or of a yellowish-white tinge, with here there similar irregular bodies scattered through t substance. The fourth structure was the crystall lens, unchanged from the normal condition as regu its composition and transparency, but coloured gre Small fatty bodies were dispersed throughout e of these structures, all of which were enclosed in sclerotic coat without being adherent to it. Th was no trace of either a retina or a vitreous humo and some blackish striæ alone were supposed to present the choroid coat. The optic nerve had natural form, but instead of true nervous matter, consisted of a yellow substance, which, under microscope, presented an appearance similar to t of the second and third layers in the eyeball abo described.—*Ibid.*